

Work Order ID 142894

Monday, March 14, 2016 11:28:31 AM

142894

Page 1

Item ID: D3639-1

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Doubler

Start Date: 4/21/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 4/29/2016 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: MLJ

Date: MAR 16 2016

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3639	Rev A

100

0.00

100

FLOW WATER JET

Waterjet

Memo

0.01

FLOW CNC Waterjet

1-Cut as per Dwg D3639 Dwg Rev: A Prog Rev: A 2-
Deburr if necessary

⑧

04/16/07/07

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

⑧

04/16/07/07

120

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.00

Quality Control

⑧

DAS
38
9-89

JUL 08 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER : ☐									

Monday, March 14, 2016 11:28:32 AM

142894

Page 2

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 4/21/2016 **Start Qty:** 4.00

4

Cust Item ID:

Required Date: 4/29/2016 **Req'd Qty:** 4.00

4

Customer:

Reference:

Run Start *NR1*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop *NR2*

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 142894

Monday, March 14, 2016 11:28:32 AM

142894

Page 3

Item ID: D3639-1

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Doubler

Start Date: 4/21/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 4/29/2016 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00							
160									
QC	Memo	0.00							
Quality Control									
170	Identify as per dwg & Stock Location: <u>ST047</u>	0.00							
170									
Packaging	Memo	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.01							
Quality Control									

DAS
38
9-89
JUL 13 2016

JUL 13 2016

DAS
21
9-89
JUL 14 2016

DAS
21
9-89
JUL 14 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Picklist Print

Monday, March 14, 2016 11:28:31 AM

Page 1

Work Order ID: 142894

142894

Parent Item: D3639-1

D3639-1

Parent Item Name: Doubler

Start Date: 4/21/2016

Required Date: 4/29/2016

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 07-07-20 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.050		Purchased	No			100	sf	52.2720	0.239	1.006316			
M2024T3S 050									**			<u>02/16/07/07</u>	
2024-T3 .050 sheet													

Location

Loc Qty

Loc Code

MAT022

52.272

m131564

50.9

m133560

1.372

2.2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

DART AEROSPACE LTD		Work Order: 142894
Description: Doubler		Part Number: D3639-1
Inspection Dwg: D3639	Rev: A	Page 1 of 1

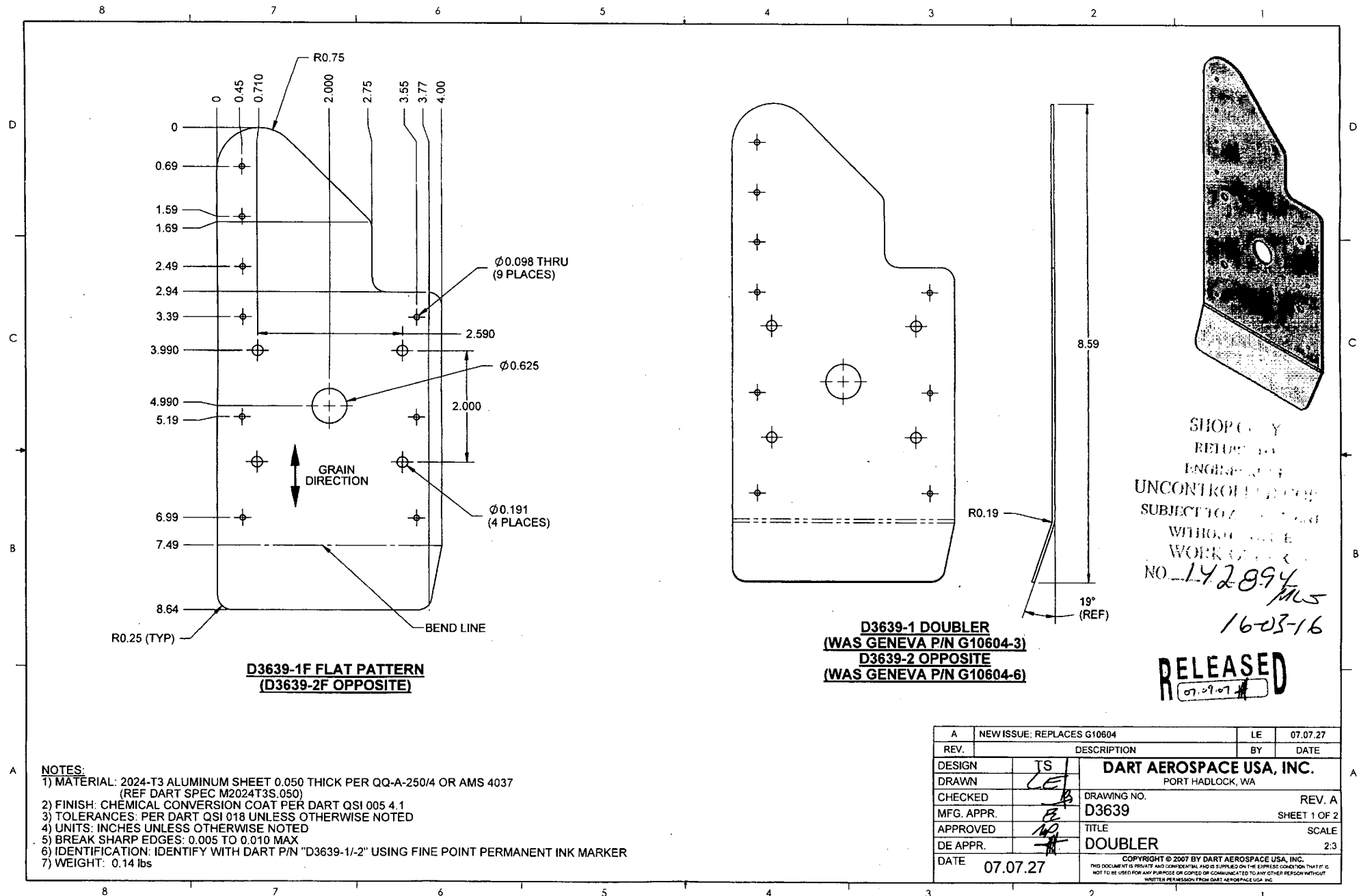
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.625	+0.008/-0.001	Ø.625	/		V-D-02	
Ø0.191	+0.005/-0.001	Ø.191	/			
Ø0.098	+0.004/-0.001	Ø.097	/			
0.69	+/-0.030	.69	/			
1.59	+/-0.030	1.59	/			
2.49	+/-0.030	2.49	/			
3.39	+/-0.030	3.39	/			
3.990	+/-0.010	3.993	/			
4.990	+/-0.010	4.991	/			
5.19	+/-0.030	5.19	/			
6.99	+/-0.030	6.99	/			
8.64	+/-0.030	8.64	/			
0.45	+/-0.030	.45	/			
0.710	+/-0.010	.712	/			
2.000	+/-0.010	2.001	/			
2.75	+/-0.030	2.75	/			
3.55	+/-0.030	3.55	/			
4.00	+/-0.030	4.00	/			
2.000	+/-0.010	2.001	/			
2.590	+/-0.010	2.588	/			

Measured by: <u> DC </u>	Audited by: <u> DAS 38 9-89 </u>	Prototype Approval: N/A
Date: <u> 16/07/07 </u>	Date: <u> JUL 08 2016 </u>	Date: N/A

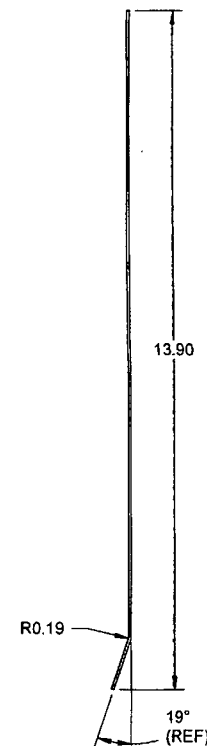
Rev	Date	Change	Revised by	Approved
A	07.10.19	New Issue	KJ/EC/DD	<u> [Signature] </u>



SHOP COPY
RETURN TO
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SUBJECT TO
WITHOUT
WORK
NO. 142894
1603-16

RELEASED
07.09.07

A	NEW ISSUE: REPLACES G10604	LE	07.07.27
REV.	DESCRIPTION	BY	DATE
DESIGN	TS	DART AEROSPACE USA, INC.	
DRAWN	LE	PORT HADLOCK, WA	
CHECKED	BS	DRAWING NO.	REV. A
MFG. APPR.		D3639	SHEET 1 OF 1
APPROVED	BS	TITLE	SCALE
DE APPR.	BS	DOUBLER	2:
DATE	07.07.27	COPYRIGHT © 2007 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS FURNISHED ON THE EXPRESS COVENANT THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



D3639-3 DOUBLER
(WAS GENEVA P/N G10604-4)
D3639-4 OPPOSITE
(WAS GENEVA P/N G10604-5)

RELEASE
07.09.07 #

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.050 THICK PER QQ-A-250/4 OR AMS 4037
(REF DART SPEC M2024T3S.050)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3639-3/-4" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.3 lbs

DESIGN	TS	DART AEROSPACE USA, INC.	
DRAWN	CE	PORT HADLOCK, WA	
CHECKED	TS	DRAWING NO.	REV. A
MFG. APPR.	CE	D3639	SHEET 2 OF 2
APPROVED	TS	TITLE	SCALE
DE APPR.	TS	DOUBLER	2:1
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